

Appln. No.: 10/753,897
Amndt. dated December 5, 2005
Reply to Office Action of August 5, 2005

Remarks/Arguments

As of the Office Action mailed August 5, 2005 claims 1-35 are pending in the application. Claims 1-25, 34 and 35 are withdrawn and claims 26-33 stand rejected. Reexamination and reconsideration are respectfully requested in light of the amendments and remarks/arguments herein.

Amendments to the Specification

The Abstract has been amended to recite "with respect to variables such as temperature and moisture levels". The amendment is clerical in nature. No new matter has been added.

The paragraph beginning on page 7, line 15 through page 7, line 18; beginning with the phrase "Furthermore, certain binders" and ending with the phrase "if desired" has been amended to recite "[t]he fat component" in line 16. This amendment is clerical in nature. No new matter has been added.

Amendments to the Claims

Claim 26 has been amended to recite that the screw conveyor provides a shear rate of at or below 10^4 (sec^{-1}). Support can be found at page 12, lines 9-14 which disclose the use of a shear rate that may be adjusted and maintained at or below 10^4 (sec^{-1}). No new matter has been entered. Claim 26 has also been amended to clarify that the screw conveyor provides mixing. Support can be found at paragraph 0021 of the published application which clarifies that the screw conveyor serves to mix the components. No new matter has been entered.

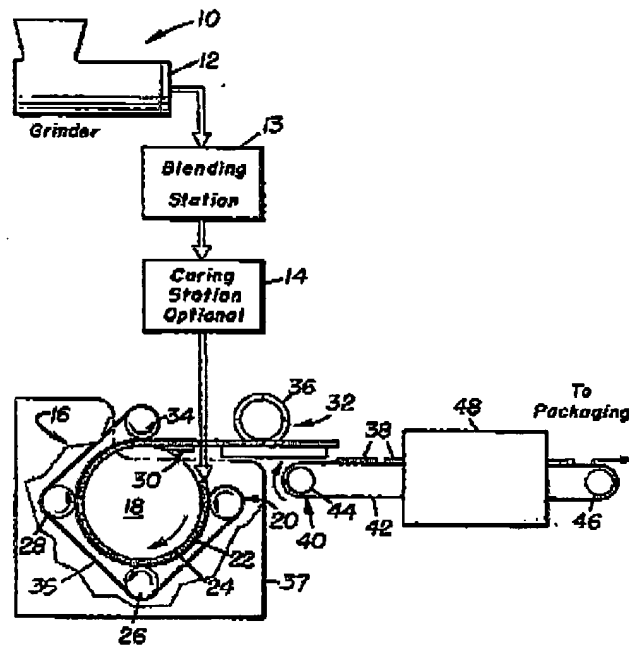
Claim 28 has been amended to make the claim dependent on claim 27 instead of claim 26. No new matter has been added.

Appln. No.: 10/753,897
 Amndt. dated December 5, 2005
 Reply to Office Action of August 5, 2005

Rejections Under 35 USC §102/103

Claims 26-29 and 33 have been rejected under 35 U.S.C. §102(b) as being anticipated by Roth, U.S. Patent No. 4,239,785. Furthermore, claims 31 and 32 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Roth in view of Karwowski et al. U.S. Patent No. 5,731,029.

Roth is directed to a method and apparatus for making jerky in a "continuous operation including a freezer drum upon which the jerky is simultaneously formed to a desired thickness and chilled or frozen within a short period of time." Col. 1, lines 4-10. The sole figure in the '785 patent is reproduced below for your convenience.



As can be seen from the above, the method described by Roth includes a grinder indicated at 10 which preferably includes a screw impeller. Col. 3, lines 44-47. The mixture is

Appln. No.: 10/753,897
Amndt. dated December 5, 2005
Reply to Office Action of August 5, 2005

then blended in a blending station 13. Col. 3, lines 49-30. The mixture may then optionally be cured at 14. Col.3, lines 61 – Col. 4, line 21.

Applicants therefore note that Roth does not mention anything regarding the importance of controlling shear rates. As noted above, claim 26 has been amended to now recite a feature for which Roth is silent. That is, the use of a shear rate at or below 10^4 (sec^{-1}). The specification of the present invention also notes that by utilizing such shear rates one may be in a better position to control the amount of thermal degradation that may be experienced by the mixture. See paragraph 0029 of the published application. It is also believed that one may not assume from the disclosure of Roth that there was any appreciation to the importance of controlling shear rates in accordance with the amended claim. In fact, Roth discloses the use of “die plates 12” and identifies his screw impellar device 10 as a “grinder” which would inform one of skill in the art that relatively high shearing (reducing particle size) is desired.

Then the material of Roth proceeds to a drum freezer, at 16. The drum freezer 16 includes a refrigerated drum 18, a feed roller 20, compression rollers 26 and 28 and another removal roller 34 which may be heated. Col. 4, line 23- Col. 5, line 28. The drum freezer is preferably “enclosed within a housing 37 within which refrigerated air is circulated to more rapidly cool the belt 35 and the jerky upon the drum.” Col. 5, lines 29-34. After cutting at the cutting station 32, the jerky may be conveyed “through a drying chamber 48 which may be preferably designed in the form of a tunnel to accomplish a number of different functions. Initially, the drying tunnel 48 provides means (not shown) such as a source of hot air or source of heat for thawing out the jerky strips 38.” Col. 5, lines 38-61.

Appln. No.: 10/753,897
Amndt. dated December 5, 2005
Reply to Office Action of August 5, 2005

Furthermore, it should be noted, that while subtle, Roth emphasizes that one should use a heated roller 34 either within the housing or outside the housing. See, col. 5, lines 29-37. In the amended claims herein, it should be noted that the present invention recites introducing the output of the screw conveyor onto rollers that cool, and introducing such product into a cooled chamber and does not rely upon a heated roller as in Roth.

Furthermore Karwowski fails to make up the deficiencies of Roth and teach or suggest the claimed method. Karwowski does not teach or suggest introducing a mixture of base material and a preheated binder into a screw conveyor maintained at a temperature of at or below about 200°F and then introducing such mixture onto rollers which form a sheet and wherein said rollers provide cooling. As disclosed in Col. 11, lines 58-62 “the dough 50 may be conveyed or transported from the cooling and mixing device 26 by means of a conventional conveyor 52, such as a continuous belt conveyor, preferably to a sheeting device 55...” The sheeting device includes two counter rotating rolls 62 and 64; however there is no disclosure whether these rolls are heated or cooled. Accordingly, the disclosure of Karwowski does not teach or suggest introducing the product on to rollers which form a sheet wherein the rollers provide cooling.

More basically, Karowski also does not teach or suggest the use of shear rates at or below 10^4 (sec⁻¹) and the associated importance disclosed in the present invention that such shear control may control thermal degradation. Furthermore, it is also believed that one of ordinary skill in the art would not find such shear control “inherent” in the disclosure of Karowski, as Karowski, similar to Roth, discloses a grinder 3 and kibbler 60, which typically provide high levels of shear.

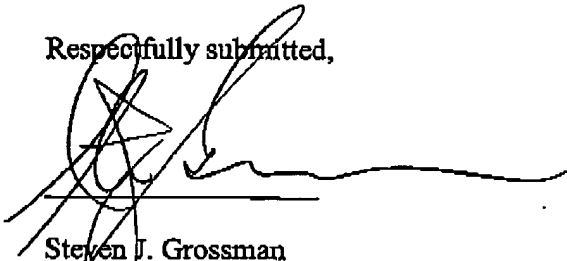
Appln. No.: 10/753,897
Amndt. dated December 5, 2005
Reply to Office Action of August 5, 2005

In light of the above, Applicants respectfully submit that claim 26 and its depending claims are not taught or suggested by the cited references. In consideration of the foregoing Applicants respectfully requests that the rejections of claims 26-33 are withdrawn upon reconsideration.

Having overcome all of the outstanding rejections, it is respectfully submitted that the application is now in condition for allowance. Early and favorable action is respectfully solicited.

In the event that there are any fee deficiencies, or additional fees are payable, please charge, or credit any overpayment to, our Deposit Account No. 50-2121.

Respectfully submitted,



Steven J. Grossman
Attorney for Applicant(s)
Reg. No. 35,001

Grossman, Tucker, Perreault & Pflieger, PLLC
55 South Commercial Street
Manchester, New Hampshire 03101
Tele: 603.668.6560